

SOME REMARKS ON THE FACIAL EXPRESSION OF BIRDS

BY GEORGE M. SUTTON

Before an audience of laymen the writer once made an allusion to the "bright and interesting face of a White-throated Sparrow." The remark caused a considerable amount of comment among certain ones of the audience who had never thought of the possibility that a bird as well as a human being may possess facial expression. Since that time, and, in fact, with such circumstances as a greater or less stimulus, a considerable amount of recording, and a vastly greater amount of observation have been accomplished with the end in view of becoming familiar with the facial expression of birds. It has become evident that even between birds of close relationship great differences may occur in this respect, and similarly, birds of distant connection may exhibit surprising similarities. It may be well to state at the outset that the eye proper, that is, the exposed cornea, with the pupil and usually colored iris showing through the translucent membranes, is not so much responsible for facial expression as is usually thought. Rather, as regards the eye, the lids in their position and movement are responsible. That the dilation of the pupil influences expression of the eye greatly is evident to one who closely observes a Great Horned Owl in a trap on the ground, whose eyes, when focused on the dark leaves at his feet, give the impression of being mellow, liquid, and lustrous, and which as suddenly as the movement of the head itself, become hard, piercing, and terribly fierce as the captive, facing the observer and the light, raises his feathers and snaps his bill sullenly.

That an Owl possesses facial expression seems readily conceivable, due to the fact that the arrangement of eyes, bill, and facial discs immediately suggests the human face. For this reason, and also on account of the possibility of successfully keeping this group in confinement, Owls have been the subject of much of the writer's study, and aside from the great delight in possessing the beautiful soft creatures, observation has brought to light numerous most interesting matters. The Screech Owl, which shrinks to become a stub on the branch where he perches, is a familiar proof that the expression of the face of a bird depends not so much on the eyes as on the eyelids, and it also shows what a great part the general contour

of the head and body plays as well. When the Screech Owl "freezes," to use the word of some authors, no change, apparently, takes place in the eye proper, but the lids are arranged in a manner used at no other time, giving the individual an unspeakably droll expression. The effect of wooden rigidity rather than downy softness is gained by a close compression of all the feathers, and the ear-tufts are raised conspicuously, though curiously enough, at such incongruous angles that symmetry is usually lost. Often, at such times, the mandibles may be parted, an addition to the effect of total loss of inherent owlish characteristics. It is possibly not so well known that the Long-eared Owl resorts to the same trick at times, and even, seem it ever so strange, the Great Horned Owl—a bird whose bold nature and great strength would seem a sufficient protection, without its resorting to so cowardly an implement as the mere imitation of a stick. The writer once had the immense satisfaction of actually overlooking one of his pet Horned Owls, which, perched on a barrel near a large pile of gunny-sacks, became so much a part of his surroundings that some time was spent in searching in the darkest and least accessible parts of the barn. When, suddenly, as it became evident that a certain supposed sack was actually the Owl, assuming the ludicrous aspect of his small relative, the Screech Owl, it provoked a hearty laugh. In every respect was this great "Tiger among birds" "frozen," even as the little Screech Owl. The outlines of the eyelids were almost exactly the same, and even in such respects as the parting of the mandibles was the simulation complete. In the face of this Owl, as he was for the first time discovered, there appeared an indiscribably humorous expression, as if the clever bird realized perfectly well just what was going on in the mind of the observer!

Anyone who has had Owls as captives will remember the great changes which come over the expression of an Owl's face when he suddenly realizes that he is no longer a captive, but free. The eyes usually open wider, and the head feathers compress, as with bobbing movement or sudden turning of the head, he peers about for a possible place of refuge. The expression, evident in most wild birds, is the most glorious the individual ever assumes. Even in a much worn and bedraggled individual an unmistakable trimness becomes evident, when he realizes that freedom is again his own.

The painter of birds must realize that for each species of

Owl there is a distinct facial expression, though in cases there is a marked similarity. Certain expressions, for example, of the Short-eared and Long-eared Owls suggest each other strongly, due probably to the fact that the eyes of both are comparatively small,—and there are certain points common to the Great Horned and Snowy. But there is quite as great a difference between the facial expressions of a Barn and Barred Owl as there is between those of a Canary and a squirrel, at least so far as shape and general effect of the facial arrangement is concerned. The Barn Owl's face may be described as sad, weird, or mystical; the Barred Owl's as open, rather mild, and frank. The weird face of the Barn Owl has gained for him an enviable publicity, for the most part in small town newspapers. He is usually heralded as the Monkey-face, and may even be described as a new beast—half monkey and half Owl. All this enthusiasm in announcing the bird as unheard of before is due to the extremely odd, even unique face. The Barn Owl, so far as the writer's experience goes, never "freezes."

The Owls, as a group, are particularly attractive in a discussion of this phase of bird-study, and might well form the subject of an entire paper, but possibly it is well to cover more ground in this paper which must be, at best, merely a collection of preliminary remarks. But before passing on, attention should be called in this connection to the Marsh Hawk, which in certain moods, and viewed from certain angles, suggests an Owl considerably. A female Marsh Hawk from front, with feathers of the head and body fluffed out, becomes a very owl-like creature. In this case the similarity is due to the facial disc of feathers, which, as is well known, is characteristic of the genus *Circus*.

Among the Falcons, Buzzard-Hawks, Accipitrine forms, and Eagles, the superciliary shield plays an important part in the facial expression, in every case giving them, with the aid of clean-cut contour and bold bill, a characteristically wild, fierce, physiognomy. In the lovely dark eyes of the Sparrow Hawk, and the great far-seeing orbs of the Golden Eagle is a keen, intelligent expression closely akin, while in almost every bird of prey is a certain brilliance and piercing quality due to the fact that the eyes are deeply set, and that the high light, and often brilliant iris, blaze out from comparatively sombre surroundings. But if for an instant it is imagined that the eye with its superciliary shield only is responsible for the fierce visage of

a Hawk, let the same creature fluff out after a satisfying meal, when the soft edges of a fluffy crest, before compressed, and the assumption of an easy attitude of body, immediately ameliorate the fierceness of the eye, and the bird seems a different creature. Similarly, though to a greater degree, may a sick hawk become in all senses of the word, sad and pitiable, though the attractive beauty of the normal expression may return for fleeting instants. The fact that many caged or zoo birds are not in good health is sufficient warning that the artist must avoid using them as models, if he is to catch the living expression of the wild bird. Better a fleeting glimpse of the true, wild face, than hours of study of the average unfortunate captive, who has lost all joy of life, and every hope of freedom.

Legend and sketch alike portray the Hawks as fiercest of birds; but to the contrary, within the scope of the writer's memory, there does not dwell the semblance of a sweeter bird face than that of a downy nestling Rough-legged Hawk, which, resting in his nest, far above a Labrador river, had no reason to fear such an oncomer whom he had never known. Surely even to the least imaginative, the attractive face of that little hawk could but win sympathy and affection, though it will be readily admitted that the parent birds as they swooped about with clear screams were exponents of typical hawkdom in every sense of the word.

The Turkey Vulture offers an interesting case of lack of positive facial characteristics, though no one could of course mistake a Vulture's face for that of any other bird. But there is scarcely anything to suggest fierceness, fear, offensiveness, or even intelligence in any marked degree. The case in hand brings to its proper place in importance the influence of the crest, and other head feathers in the facial expression. Remove the feathers entirely from any bird's head, and it is rather startling that the eye seems to lose all its former importance as a factor. However, that there is a marked difference in the expressions of similarly headed birds, such as the Wild Turkey and Turkey Vulture, goes without saying, and it will be observed that the bill, nostrils, and color and lustre of the eye are all important factors.

Plates of birds often give the impression that a bird's eyes are perfectly round, and though this is actually sometimes the case, it is very unusually so, and quite the exception to the rule. Similarly, in mounted specimens one may often discover

the same defect. The taxidermist endeavors to round out the lids to such a degree that the delicate angles and contours responsible for the eye's expression are hopelessly lost. Especially is this the case with the Shore-birds, whose usually very dark eyes are framed in delightfully shaped lids. In some cases the fore angle is quite acute, but in the greater number of species the rear angle is the smaller by far, and sometimes lower down in the head than the fore-angle. All these facts mean that the student or artist who would successfully paint or mount birds must know the facial expression of his subjects. The Woodcock's rather droll expression is often imperfectly represented, though it is almost impossible to lose utterly *this* expression, due to the fact that the eye must be placed far back in the head if the anatomy of the creature is observed at all. Nine times out of ten, in mounted specimens, the beautiful narrowed eyes of the Lesser Yellow-legs are rounded out like those of the Black-bellied Plover, and the proportion is almost as disheartening, I believe, in the case of published portraits of the bird.

If, in drawing a bird's head, the eye be placed intentionally too far back or too high in the head, it will be evident how important such matters are, and when it is properly realized that every minute detail is for the most part just as constant as the more blatant ones, the artist and taxidermist will come to acknowledge the gravity of his task of bringing real lifelikeness to his creations.

In the case of nearly all woodpeckers the rear angle of the eye is higher than the fore. If this point is not properly imitated or reproduced a large part of the typical Woodpecker expression goes. And similarly, in the case of Loons and many divers, the eyes are rather elliptical, and give, together with their color and position in the head, a rather serpentine visage. The Puffin has an indescribably artificial looking eye, though there is a suggestion of more actuality when the bird grasps something in its bill. The cornea of the Puffin's eye is very flat. The iris is a cold, flat gray, and the high light, due to the flat surface of the cornea, is hardly apparent at all at times. These points give the Puffin an expression all his own, and coupled with the notably eccentric bill make it one of the most characterful species.

In the case of some Grebes, notably the Horned as a common example, the eye is truly wonderful, aside from its being

part of a bird's face. Like a glowing gem of salmon pink, set in a soft gray or deep black velvet matrix, its white encircled pupil gives a startlingly snakelike look, even in a dead specimen. A burnished gold edging about the pupil of the Razor-billed Auk gives the same effect and the pupil of this bird's eye is delicately fringed in a manner I believe unique. The Road-runner adult is another species with a serpent-like face, due to the fact that the pupil of the eyes is ringed with a light circle, in addition to the dark colored iris.

Those who know the small birds intimately will agree that various feelings are expressed in the face; that there is a cognizable difference between the contented, the angry, the sick, and the terrorized individual. Whether any other moods, such as jealousy, laughter, or an appreciation of humor, and "vamping," may be thus indicated by the facial expression is highly doubtful, and of course implies a considerable range of intelligence for the bird. The feathers of the terrorized bird are usually pressed close to the body, and the feathers of the head and neck and legs are so tightly drawn in that the anatomy is plainly visible—where in the same bird in a contented condition a rounded contour would be evident. Fear is often indicated by parting of the bill, and of course very rapid breathing. Every collector knows that a bird just shot, and picked up in all its fresh beauty from the ground possesses a wonderfully sweet facial expression, one rarely if ever seen in the living bird. This may be due partly to the closing lids, but it is caused more, possibly, by the delicate lifting of all the feathers, and the fact that the eye has lost all focal powers. How many times must the collector think, even if he does not speak, his thoughts: "What a beautiful face this little bird has."

To watch a caged canary for a short time reveals the fact that it directs its eyes either forward, up, or down, at will, much as we do; this muscular action is the property of many species, to a greater or less degree, but in the Owls and Hawks is slight and scarcely noticeable. It means, therefore, that the Owl, to follow an object, must turn its head, and not only its eyes,—whereas, other forms may look forward or to the side with equal ease. Thus may the artist depict a small Passerine form with bill pointed directly at the observer, and the eyes also, whereas, if the Owl's profile be given the focus of the eyes of the bird must be in the same direction as that of the bill.

The presence or absence of eyelashes affects the facial ex-

pression to a degree, though this is possibly a negligible matter. Among the Cuckoos, which have lashes, the face is characterized by a somewhat mystical solemnity. The contrastingly colored lids in this case are of great importance.

The matter of high lights on the eyes is interesting. The writer once crippled a Killdeer, and while it was yet living observed that in the outdoors at close range, almost the whole upper half of the eye was in high-light, and a vivid reflection of the landscape was apparent. Moreover, the high-light was much dimmer than usual—in fact several shades deeper than the white on the throat. The experience rather spoiled a theory held up till this event, namely, that the whitest white and deepest black on the bird always occurs in the eye. It seems that the deepest dark does occur in the eye; but as to the whitest white,—that is another matter.

A word may well be said as to the practical methods of registering and noting the correct facial expression. Constant use of the camera is of course a splendid course to follow, but one finds use of the camera often impracticable, and furthermore, if it is desired to preserve the shades of color of the fleshy parts, water color sketches will best serve the purpose. Thus, when birds are shot, may their life colors be preserved, and the comparative distances of base of bill to eye, and contour of the feathers, be carefully noted and recorded. Later, then, with the use of a skin, some photographs perchance, illustrating habitat, and the field sketches, may a final portrait of the bird be executed which may do at least a fair amount of justice to the subject. But better still is the detailed drawing or portrait from life.

In the foregoing very much scattered remarks a mere hint at the scope of the subject has been given; but it may suggest to some at least an interesting field of endeavor, and will form the basis of a plea for more accurate bird taxidermy, and redoubled effort to make all bird portraits lifelike in every respect. Though the artist will forever cry that we must idealize and improve Nature, it may truly be said that Nature herself is so glorious that we would do well to be content in depicting her even as she is.